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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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EXAMINER

WANG, LIANG CHE-A

ART UNIT	PAPER NUMBER
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2155

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 09/779,390	Applicant(s) FORD ET AL.	
	Examiner Liang-che Alex Wang	Art Unit 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-21 are presented for examination.
2. Claims 14, 8, 11, 12, 16, 20, and 21 are amended.

Response to Arguments

3. Applicant's arguments filed 1/16/2007, have been fully considered but they are not persuasive.
4. In that remarks, applicant's argues in substance:

That: Nowhere does Baratz teach that the broadcast includes an attribute that "describes a service performed by the component." Baratz includes bits that identify a resource type and resource name. A service performed by the resource is not identified in the broadcast. This is not found persuasive because in Col 12, lines 44-48, Baratz teaches Byte 4, bit 0 of the broadcasted LOCATE message, is an indicator that indicates (describes) if the directory service (service) is completed. Therefore Baratz teaches the claimed limitation where the broadcast (LOCATE message) includes an attribute (Byte 4 bit 0) that describes a service performed by the component (indicating the status of a service is describing a service performed by the component).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-10, 12-14, 17-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Baratz et al., US Patent Number 4,914,571, hereinafter Baratz.
7. Referring to claim 1, Baratz teaches in a distributed computer networked system (system 50, figure 1) having at least one service consumer (requestor) and at least one service provider (Col 6 lines 63-68) a method for locating a remote software component (Col 2 lines 13-17) comprising:
 - a. generating a request (LOCATE message, Col 5 lines 59-63) for identification of a component having at least one specified attribute (Col 12 lines 17-23) that describes a service performed by the component (Col 12, lines 44-48, Byte 4, bit 0 of the broadcasted LOCATE message, is an indicator that indicates (describes) if the directory service (service) is completed);
 - b. broadcasting the request across the network (figure 14D, step 111, Col 20 lines 58-60);
 - c. receiving the request at a service provider (Col 20 lines 60-63);
 - d. comparing the at least one specified attribute of the received request with component attributes of the service provider (Col 20 lines 60-61, in order for a resource to be located from the broadcast search, each provider must compare with the request to see if it is able to support the request);
 - e. communicating a response to the requesting service consumer (Col 20 lines 61-63), wherein the response indicates a location of the requested component associated with the service provider (Col 6 lines 62-68, Col 7 lines 21-23, a

positive reply indicates the service provider contains a location of the requested resource).

8. Referring to claim 2, Baratz teaches the method as defined in claim 1, wherein the remote software component is selected from the group consisting of: a service, a resource, an interface, and a program segment (Col 2 lines 15-26, Col 3 lines 65-68);
9. Referring to claim 3, Baratz teaches the method as defined in claim 1, further including the step of formulating a service descriptor that describes attributes for components at the service provider, the service descriptor being an object that specifies the at least one specified attribute (Figure 4, and Figure 9 LOCATE message; Col 12, lines 44-48, Byte 4, bit 0 of the broadcasted LOCATE message, is an indicator that indicates (describes) if the directory service (service) is completed).
10. Referring to claim 4, Baratz teaches the method as defined in claim 1, wherein the step of broadcasting the request utilizes a multicast protocol for broadcasting the request across the network (Col 20 lines 58-60, broadcasting to all server corresponds to multicast protocol).
11. Referring to claim 5, Baratz teaches the method as defined in claim 1, wherein the network is a local area network (Figure 14C step 90, broadcast search is performed within the domain corresponds to a local area network).
12. Referring to claim 6, Baratz as modified has further taught wherein the network is a wide area network (Figure 14D step 111, broadcast is sent to all servers corresponds to a wide area network).

13. Referring to claim 7, Baratz teaches the method as defined in claim 1, wherein the step of communicating a response utilizing a unicast protocol (Col 6 lines 67-68, reply is returned only to its serving network node).
14. Referring to claim 8, Baratz teaches the method as defined in claim 1, further includes the step of formulating the response by the service provider, the response includes an identification of a network location of the service provider (Col 7 lines 21-23, Figure 4, Col 12 lines 56-58, reply message contains the location of the requested service).
15. Referring to claim 9, Baratz teaches the method as defined in claim 8, further includes the step of directly requesting the component from the service provider by the service consumer, in response to the response received by the service consumer (Col 2 lines 15-17, Col 5 lines 48-53).
16. Referring to claim 10, Baratz teaches the method as defined in claim 8, wherein the step of formulating a response further includes associating response code for interfacing with the requested component, without requiring a driver to be separated installed on the service consumer (Col 6 lines 67-68, positive and negative are viewed as a response code for interfacing with the requested component).
17. Referring to claims 12-15, 17, claims 12-15, 17 encompass the same scope of the invention as that of the claims 1, 4, 8-10. Therefore, claims 12-15, 17 are rejected for the same reason as the claims 1, 4, 8-10.
18. Referring to claim 18, Baratz teaches the system as defined in claim 13, wherein the means for generating a request includes a service finder (Col 12 lines 5-35, LOCATE message includes a locate variable base).

19. Referring to claim 19, Baratz teaches the system as defined in claim 13, further including means for consolidating response and providing the consolidated response to the service consumer (Col 7 lines 21-23, Figure 4)
20. Referring to claim 20, claim 20 encompasses the same scope of the invention as that of the claim 1. Therefore, claim 20 is rejected for the same reason as the claim 1.
21. Referring to claim 21, Baratz teaches in a distributed computer networked system (system 50, figure 1) having at least one service consumer (requestor) and at least one service provider (Col 6 lines 63-68) a method for locating a remote software component (Col 2 lines 13-17) comprising:
- a. generating a request (LOCATE message, Col 5 lines 59-63) for identification of a component having at least one specified attribute (Col 12 lines 17-23) that describes a service performed by the component (Col 12, lines 44-48, Byte 4, bit 0 of the broadcasted LOCATE message, is an indicator that indicates (describes) if the directory service (service) is completed);
 - b. broadcasting the request across the network (figure 14D, step 111, Col 20 lines 58-60);
 - c. receiving the request at each of a plurality of service providers on the network (Col 20 lines 60-63);
 - d. comparing, at each of the plurality of service providers, the at least one specified attribute of the received request with component attributes of the service provider to identify a matching component (Col 20 lines 60-61, in order for a resource to

- be located from the broadcast search, each provider must compare with the request to see if it is able to support the request); and
- e. communicating, from each of the plurality of service providers, a response to the requesting service consumer (Col 20 lines 61-63), wherein the response indicates a location of the requested component associated with the service provider (Col 6 lines 62-68, Col 7 lines 21-23, a positive reply indicates the service provider contains a location of the requested resource).

Claim Rejections - 35 USC § 103

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

23. Claims 11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baratz,

in views of Chandra et al., US Patent Number 6,889,254, hereinafter Chandra.

24. Referring to claim 11, Baratz teaches the method as defined in claim 10.

Baratz does not teach the response code includes a Java code in a form of stub object.

However, Chandra teaches that it the response to a query request could be a JAVA code (Col 5 lines 28-31).

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to incorporate the response with JAVA code of Chandra in

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Baratz at because both Chandra and Baratz teaches information retrieval across a distributed network (Chandra, Col 1 lines 5-12, Baratz Col 1 lines 20-24).

A person with ordinary skill in the art would have been motivated to make the modification to Baratz because it allows application programs to be constructed that can execute on any computer platform without having to be rewritten or recompiled by the programmer, to save time and resources.

25. Referring to claim 16, claim 16 encompass the same scope of the invention as that of the claim 11. Therefore, claim 16 is rejected for the same reason as the claim 11.

Conclusion

26. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
27. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.
28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liang-che Alex Wang whose telephone number is

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(571)272-3992. The examiner can normally be reached on Monday thru Friday, 8:30 am to 5:00 pm.

29. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571)272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
30. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Liang-che Alex Wang
January 31, 2007



SALEH NAJJAR
SUPERVISORY PATENT EXAMINER